

**IN THE UNITED STATES DISTRICT COURT  
FOR THE WESTERN DISTRICT OF TEXAS  
WACO DIVISION**

**TRAXCELL TECHNOLOGIES, LLC,  
Plaintiff,**

**v.  
APPLE, INC.,  
Defendant.**

**CASE NO. 6:21-cv-00074**

**JURY DEMAND**

**PLAINTIFF’S ORIGINAL COMPLAINT FOR PATENT INFRINGEMENT**

Traxcell Technologies, LLC. (“Traxcell”) files this Original Complaint, and demand for jury trial seeking relief from patent infringement by Apple, Inc. (“Defendant” or “Apple”), alleging infringement of the claims of U.S. Pat. No. 9,918,196 and U.S. Pat. No. 9,549,388 (collectively referred to as “Patents-in-Suit”), as follows:

**I. THE PARTIES**

1. Plaintiff Traxcell is a Texas Limited Liability Company, with its principal place of business located at 103 Country Club Drive. #508, Marshall, Texas 75672.

2. Apple is a California corporation having regular and established places of business at 12535 Riata Vista Circle and 5501 West Parmer Lane, Austin, Texas. Apple designs, manufactures, uses, imports into the United States, sells, and/or offers for sale in the United States smartphones, tablets, iPods, desktop computers, and notebook computers that use Apple Maps. Apple markets, sells, and offers to sell its products and/or services, including those accused herein of infringement, to actual and potential customers and end-users located in Texas and in the judicial Western District of Texas such as at the Barton Creek Mall (2901 S. Capital of Texas Hwy) and in the Domain (3121 Palm Way, Austin, TX 78758) in Austin, Texas. Apple may be served with

process through its registered agent for service in Texas: CT Corporation System, 1999 Bryan Street, Suite 900, Dallas, Texas 75201.

## **II. JURISDICTION AND VENUE**

3. This is an action for patent infringement arising under the patent laws of the U.S., 35 U.S.C. §§ 1 et. seq. This Court has subject matter jurisdiction pursuant to 28 U.S.C. §§ 1331, 1332(a) and 1338(a).
4. This Court has personal jurisdiction over Defendants because: Defendants are present within or has minimum contacts within the State of Texas and this judicial district; Defendants have purposefully availed itself of the privileges of conducting business in the State of Texas and in this judicial district; Defendants regularly conducts business within the State of Texas and within this judicial district; and Plaintiff's cause of action arises directly from Defendants' business contacts and other activities in the State of Texas and in this judicial district. The amount in controversy is more than \$75,000.00.
5. Venue is proper in this judicial district per 28 U.S.C. §§ 1391 and 1400(b). Apple has committed acts of infringement in this judicial district and maintains regular and established places of business in this district, as set forth above. Apple has continuous and systematic business contacts with the State of Texas. Apple, directly or through subsidiaries or intermediaries (including distributors, retailers, contract manufacturers, and others), conducts its business extensively throughout Texas, by shipping, manufacturing, distributing, offering for sale, selling, and advertising (including the provision of interactive web pages) its products and services in the State of Texas and the Western District of Texas, including Apple Maps. Apple, directly or through subsidiaries or intermediaries (including distributors, retailers, contract manufacturers, and others), has

purposefully and voluntarily placed its infringing products and services into this District and into the stream of commerce with the intention and expectation that they will be purchased and used by consumers in this District, including Apple Maps. Apple has offered and sold and continues to offer and sell these infringing products and services in this District, including at physical Apple stores located within this District. Apple also has derived substantial revenues from infringing acts, including but not limited to advertising, business APIs, private usage, OEM usage, and an attribution of a portion of each device sale or lease to Apple Maps.

6. Apple has committed acts of infringement in this judicial district and has a regular and established place of business in this judicial district. Austin, where Apple employs over 5,000 employees and has several corporate campuses, is Apple's largest corporate hub outside of its headquarters in Cupertino, California.

### **III. INFRINGEMENT ('196 Patent (attached as Exhibit A))**

7. On March 13, 2018, U.S. Patent No. 9,918,196 ("the '196 patent"), attached as Exhibit A, entitled "Internet queried directional navigation system with mobile and fixed originating location determination" was duly and legally issued by the U.S. Patent and Trademark Office. Traxcell owns the '196 patent by assignment.
8. The '196 Patent's Abstract states, "A mobile wireless network and a method of operation provide directional assistance in response to an Internet query. The directional assistance is provided from a location of the querying device to a destination that may be selectively prompted based on whether the destination is a nearby business, a type of business, a street address, or another mobile device or fixed telephone location. The location of the querying device is also selectively determined depending on whether the querying device is a

wireless device such as a mobile telephone, or whether the device has a presumed fixed location, such as an ordinary telephone connected to a public-switched telephone network (PSTN).

9. The following preliminary exemplary chart provides notice of Traxcell's allegations of infringement.

Exemplary Claim	Corresponding Structure in Accused Systems
<p>A method of providing navigation assistance to a user of a communications device, the method comprising:</p>	<p>Apple Devices that supports the Apple Maps online navigation service together with the Apple Maps server-side or cloud infrastructure needed to provide the service, constitute the "Accused System".</p> <p>The term "Apple Maps" encompasses and includes all the versions and variants of the Apple Maps web (for PCs, laptops and other computers functioning with macOS or Mac OS X operating systems) and the Apple Maps app [Apple Maps app for iOS devices (iPhone, iPad, iPod Touch etc.) and watchOS devices] and the applications supported by the Apple Maps Platform.</p> <p>The "method of providing navigation assistance to a user of a communications device" refers to the method by which Apple Maps provides online navigation assistance (directions) to a user of a communications device or UE (example: mobile phone, smartphone, laptop, tablet, iPhone, iPad, iPod Touch etc.) including the Apple Maps app or including a browser plugin enabling access to the Apple Maps website or having other means to access the Apple Maps website, for querying and receiving navigation instructions for travelling from a starting location (current location of the communications device or a location specified by its user as the 'origin') to a destination location (a location specified by the said user as the 'destination').</p> <p>The "communications device" refers to a UE (example: iPhone, iPad, iPod Touch, mac book etc.) including the Apple Maps app or including a browser plugin enabling access to the Apple Maps website or having other means to access the Apple Maps website for querying and receiving navigation instructions for travelling from a starting</p>

Exemplary Claim	Corresponding Structure in Accused Systems
	<p>location (current location of the communications device or a location specified by its user as the ‘origin’) to a destination location (a location specified by the said user as the ‘destination’).</p>
<p>receiving, by a directional assistance service, an Internet query initiated at the communications device and directed via the Internet to initiate a request for navigational assistance to a destination;</p>	<p>Navigation using Apple Maps online navigation service is a well-known example of off-board navigation. To elaborate, an off-board navigation system is a client/server system wherein only the user interface (UI) resides on the client’s (user’s) communications device and all the databases (GIS and/or mapping) and infrastructure required for computation (of route, distance, travel time, traffic etc.) reside remotely on a server or a network of servers (the server-side) located on the world wide web (www). The server-side could also comprise virtual (instead of physical) or cloud server infrastructure. The client side (user interface or UI at a user’s communications device) can only communicate with the server-side via the Internet.</p> <p>This claim element refers to the method and process involved in initiating a navigation query, using Apple Maps online navigation service, to obtain directions (navigation assistance) for travelling from a starting location to a destination location. The process involved in initiating the said navigation query includes inputting a destination location at the Apple Maps’ user interface (UI) at the user’s communications device, and sending the said query via Internet to the remote Apple Maps server (cloud server). The said remote Apple Maps server (cloud server) receives the said query via Internet.</p> <p>The term “directional assistance service” herein refers to Apple Maps online navigation service supported and facilitated by a wireless telecommunications network.</p> <p>The “communications device” refers to a UE (example: iPhone, iPad, iPod Touch, MacBook etc.) including the Apple Maps app or including a browser plugin enabling access to the Apple Maps website or having other means to access the Apple Maps website, for querying and receiving navigation instructions for travelling from a starting location (current location of the communications device or a location specified by its user as the ‘origin’) to a destination location (a location specified by the said user as the ‘destination’).</p> <p>The said “communications device” (the user of the said “communications device”) being a subscriber of wireless telecommunications network services.</p> <p>When subscribers utilizes Apple Maps online on their communications devices (UEs) using wireless telecommunication network , queries (directed to the Apple Maps server) and responses (informational, navigational or directional assistance from the Apple Maps server) are communicated between the client-side (Apple Maps application installed on a user’s wireless mobile communications device) and the server-side (Apple Maps server).</p>

Exemplary Claim	Corresponding Structure in Accused Systems
	<p>The method of using the Apple Maps for navigation includes initiating a query at a user's communications device (UE) to initiate a request for navigational assistance for travelling from a starting point (which could be the current location of the user's communications device) to a destination, by specifying (inputting) the destination and the starting point (if different from the current location of the user's communications device).</p> <p>The said query is directed via the Internet to the remote Apple Maps server (cloud server). In other words, the Apple Maps server (cloud server) receives the said query through the Internet.</p> <p>Apple Maps online navigation is an example of off-board navigation. In other words, Apple Maps online navigation system is a client/server system wherein only the user interface (UI) resides on the client's (user's) communications device and all the databases (GIS and/or mapping) and infrastructure required for computation (of route, distance, travel time, traffic etc.) reside remotely on the Apple Maps server (which could be a network of servers) [the server-side] located on the world wide web (www). The server-side could also comprise virtual (instead of physical) or cloud server infrastructure. The client side (user interface or UI at a user's communications device) can only communicate with the server-side via the Internet. In other words, destination is input and a query is initiation at the Apple Maps user interface (UI) at the client device and the query (including the input destination) is communicated from the client-side (client or user's communications device) to the remote server-side (Apple Maps server) via the Internet. The Apple Maps server, upon receiving the query (including the input destination) communicated from the client-side (client or user's communications device) via the Internet, identifies the required vector maps, computes or calculates the route(s), and downloads the required vector maps and the computed or calculated route(s) to the client-side (client or user's communications device) via the Internet.</p>
responsive to receiving the Internet query, determining whether or not the communications device is a mobile wireless communications device;	<p>Apple Maps is programmed to identify the "phone number" and the "device identifiers" of the communications device (UE) at which the said navigation query is initiated. In other words, Apple Maps determines whether or not the said communications device (UE) is a mobile wireless communications device (UE)</p> <p>"a mobile wireless communications device" refers to a mobile wireless communications device or UE (example: mobile phone, smartphone, laptop, tablet, iPhone, iPad, iPod Touch etc.), which includes the Apple Maps app or includes a browser plugin enabling access to the Apple Maps website or has other means to access the Apple Maps website for querying and receiving navigation instructions for travelling from a starting point (current location of the communication's device or a location specified by its user as the 'origin') to a destination location (a location specified by the said user as the 'destination'). Any wireless mobile communications</p>

Exemplary Claim	Corresponding Structure in Accused Systems
	<p>device, which uses Mobile Hotspot for connecting to the Internet and includes the Apple Maps app or a browser plugin enabling access to the Apple Maps website or has other means to access the Apple Maps website, also corresponds to this claim element.</p> <p>In Apple's Privacy Policy document, it is clearly indicated that Apple (which includes Apple Maps) collects information such as phone number and device identifiers pertaining to the communications device (UE) at which a navigation query is initiated and communicated to the Apple Maps server. In other words, Apple Maps has means to determine whether a querying communications device (UE) is a mobile wireless communications device (UE) or not.</p> <p>The following is mentioned therein –</p> <p><b>“What personal information we collect</b></p> <p>When you create an Apple ID, apply for commercial credit, purchase a product, download a software update, register for a class at an Apple Retail Store, connect to our services, contact us including by social media or participate in an online survey, we may collect a variety of information, including your name, mailing address, phone number, email address, contact preferences, device identifiers, IP address, location information, credit card information and profile information where the contact is via social media.”</p> <p>In the aforementioned, it is also mentioned that when a user connects to Apple's services (like Apple Maps online navigation), Apple also collects the IP address from which the said user connects to Apple's services (like Apple Maps online navigation). In other words, when a user connects to the Apple Maps server using the client-side UI on his/her communications device (UE) via Internet, the Apple Maps server collects the IP address from which the said user connects to the Apple Maps server.</p> <p>Based on the above information, it is confirmed that whenever a communications device uses Apple Maps, information such as mobile network information including the name of the carrier providing data services to the said communications device are collected by Apple (Apple Maps). In other words, Apple Maps can also ascertain whether the communications device (UE) at which the said navigation query is initiated, is connected to the Apple Maps server through a wireless telecommunications network service (i.e. through RF signal-based communication) or through a Wi-Fi network supported by a fixed (wired or wireless) broadband Internet service.</p> <p>In summary, Apple Maps has means to determine whether a querying communications device (UE) is a mobile wireless communications device (UE) or not,</p>

Exemplary Claim	Corresponding Structure in Accused Systems
	<p>and also whether the said communications device (UE) is connected to the Apple Maps server through a wireless telecommunications network service (i.e. through RF signal-based communication) or through a Wi-Fi network supported by a fixed (wired or wireless) broadband Internet service.</p>
<p>responsive to determining that the communications device is the mobile wireless communications device, the directional assistance service determining and using a present location of the mobile wireless communications device as a location of the communications device;</p>	<p>If the Apple Maps online navigation service determines that the said navigation query has been initiated at a mobile wireless communications device (UE), and that the said query was communicated through a wireless telecommunications network service (i.e. through RF signal-based communication), Apple Maps determines current location of the mobile wireless communications device (UE) and uses it as the starting point for providing navigation information (instructions or directions) to travel to the destination input by the user of the said communications device (UE).</p> <p>The “the mobile wireless communications device” or the “communications device” refers to the mobile wireless communications device or UE (example: mobile phone, smartphone, laptop, tablet, iPhone, iPad, iPod Touch, mac-book etc.) The UE at which the navigation query was initiated.</p> <p>It has been demonstrated that a user can simply input a “destination” entry and initiate a navigation query on the Apple Maps’ client-side user interface (UI) at the user’s mobile wireless communications device (Apple Maps app on an iPhone). The Apple Maps server, upon receiving the navigation query (including input “destination”) from the client-side via Internet, determines the “current location” of the user’s mobile wireless communications device, uses it as the default starting point, ascertains the location of the input “destination”, computes or calculates the route(s) and directions, and downloads the computed or calculated route(s) and directions to the user’s mobile wireless communications device.</p> <p>As has been mentioned with reference to the previous claim element, Apple Maps, upon receiving a navigation query from a user’s communications device, determines whether or not the said communications device is a mobile wireless communications device.</p> <p>It is clearly indicated that a user can simply input a “destination” entry and initiate a navigation query on the Apple Maps’ client-side user interface (UI) at the user’s mobile wireless communications device (Apple Maps app on iPhone, iPad or iPod Touch). The Apple Maps server, upon receiving the navigation query (including input “destination”) from the client-side via Internet, determines the “current location” of the user’s mobile wireless communications device, uses it as the default starting point, ascertains the location of the input “destination”, computes or calculates the route(s) and directions, and downloads the computed or calculated route(s) and directions to the user’s mobile wireless communications device. The following is mentioned therein –</p>



Exemplary Claim	Corresponding Structure in Accused Systems
	<p><b>“Get directions</b></p> <ol style="list-style-type: none"> <li>1. Open Maps and enter your destination in the Search bar.</li> <li>2. Tap Directions.</li> <li>3. Choose Drive, Walk, Transit, or Ride.</li> </ol> <ol style="list-style-type: none"> <li>4. Select the route that you prefer. Maps shows the fastest route first based on traffic conditions.</li> <li>5. When you're ready, tap “GO”. To see an overview of your route, tap "Tap for Overview" in the banner.</li> <li>6. To end navigation, tap “End”, in the bottom right corner. Then tap End Route. You can also ask Siri to "Stop Navigating" when you have Hands-Free turned on.”</li> </ol> <p><b>[Note:</b> The “Starting point” is by default the current location of the user’s communications device, unless otherwise specified]</p>
<p>responsive to determining that the communications device is not the mobile wireless communications device, obtaining a fixed location associated with the communications device to determine the location of the</p>	<p>As mentioned previously, Apple Maps is programmed to identify the “phone number” and the “device identifiers” of the communications device (UE) at which the said navigation query is initiated, and also to ascertain the IP address from where the communications device (UE) at which the said navigation query is initiated connected to the Apple Maps server.</p> <p>In other words, Apple Maps has means to determine whether a querying communications device (UE) is a mobile wireless communications device (UE) or not, and also whether the said communications device (UE) is connected to the Apple Maps server through a wireless telecommunications network service (i.e. through RF signal-based communication) or through a Wi-Fi network supported by a fixed (wired or wireless) broadband Internet service.</p> <p>In Apple’s Privacy Policy document, it is clearly indicated that Apple (which includes Apple Maps) collects information such as phone number and device identifiers</p>

Exemplary Claim	Corresponding Structure in Accused Systems
communications device; and	<p>pertaining to the communications device (UE) at which a navigation query is initiated and communicated to the Apple Maps server. In other words, Apple Maps has means to determine whether a querying communications device (UE) is a mobile wireless communications device (UE) or not.</p> <p>The following is mentioned therein –</p> <p><b>“What personal information we collect</b></p> <p>When you create an Apple ID, apply for commercial credit, purchase a product, download a software update, register for a class at an Apple Retail Store, connect to our services, contact us including by social media or participate in an online survey, we may collect a variety of information, including your name, mailing address, phone number, email address, contact preferences, device identifiers, IP address, location information, credit card information and profile information where the contact is via social media.”</p> <p>In the aforementioned, it is also mentioned that when a user connects to Apple’s services (like Apple Maps online navigation), Apple also collects the IP address from which the said user connects to Apple’s services (like Apple Maps online navigation). In other words, when a user connects to the Apple Maps server using the client-side UI on his/her communications device (UE) via Internet, the Apple Maps server collects the IP address from which the said user connects to the Apple Maps server.</p> <p>Based on the above information, it is confirmed that whenever a communications device uses Apple Maps, information such as mobile network information including the name of the carrier providing data services to the said communications device are collected by Apple (Apple Maps). In other words, Apple Maps can also ascertain whether the communications device (UE) at which the said navigation query is initiated, is connected to the Apple Maps server through a wireless telecommunications network service (i.e. through RF signal-based communication) or through a Wi-Fi network supported by a fixed (wired or wireless) broadband Internet service.</p> <p>In summary, Apple Maps has means to determine whether a querying communications device (UE) is a mobile wireless communications device (UE) or not, and also whether the said communications device (UE) is connected to the Apple Maps server through a wireless telecommunications network service (i.e. through RF signal-based communication) or through a Wi-Fi network supported by a fixed (wired or wireless) broadband Internet service.</p> <p>If Apple Maps determines that the communications device (UE) at which the said navigation query is initiated is not a mobile wireless communications device, or in other words, if the said communications device (UE) is determined to be a stationary</p>

Exemplary Claim	Corresponding Structure in Accused Systems
	<p>or fixed communications device, for example – a Mobile phone, smartphone, iPhone, iPad, iPod Touch, laptop or tablet connected or tethered to a Wi-Fi (internet) access point, modem, router or Wi-Fi hotspot supported by a fixed (wired or wireless) broadband Internet Service, Apple Maps determines the location of the said stationary or fixed communications device by identifying the Internet Service Provider or Wi-Fi hotspot serving the said communications device and obtaining the stationary location of the said Wi-Fi (internet) access point, modem, router or hotspot from a Wi-Fi database, Wi-Fi location database or Wi-Fi hotspot database.</p>
<p>the directional assistance service providing navigation information to the communications device in response to the Internet query, wherein the navigation provides directions for proceeding from the location of the communications device to a location of the destination.</p>	<p>In response to receiving the navigation query (which includes the “destination” entry input by the user at the Apple Maps client-side user interface or UI residing at the user’s communications device) initiated at the communications device (UE) and directed via the Internet, Apple Maps server determines the current location of the querying (the user’s) communications device, considers it the default starting point, ascertains the location of the input “destination”, computes and provides the navigation information (directions) to the said communications device (UE) to travel from the current location of said communications device (UE) to the input destination.</p> <p>a user can simply input a “destination” entry and initiate a navigation query on the Apple Maps’ client-side user interface (UI) at the user’s mobile wireless communications device (Apple Maps app on iPhone, iPad or iPod Touch). The Apple Maps server, upon receiving the navigation query (including input “destination”) from the client-side via Internet, determines the “current location” of the user’s mobile wireless communications device, uses it as the default starting point, ascertains the location of the input “destination”, computes or calculates the route(s) and directions, and downloads the computed or calculated route(s) and directions to the user’s mobile wireless communications device. In this manner, Apple Maps provides the navigation information (directions) to the said communications device (UE) to travel from the current location of said communications device (UE) to the input destination.</p> <p>The following is mentioned therein –</p> <p><b>“Get directions</b></p> <ol style="list-style-type: none"> <li>1. Open Maps and enter your destination in the Search bar.</li> <li>2. Tap Directions.</li> <li>3. Choose Drive, Walk, Transit, or Ride.</li> </ol>

Exemplary Claim	Corresponding Structure in Accused Systems
	<p>4. Select the route that you prefer. Maps shows the fastest route first based on traffic conditions.</p> <p>5. When you're ready, tap "GO". To see an overview of your route, tap "Tap for Overview" in the banner.</p> <p>6. To end navigation, tap "End", in the bottom right corner. Then tap End Route. You can also ask Siri to "Stop Navigating" when you have Hands-Free turned on."</p> <p><b>[Note:</b> The "Starting point" is by default the current location of the user's communications device, unless otherwise specified]</p>

10. Defendant makes, uses, offers to sell, and/or sells within or imports into the U.S. wireless networks, wireless-network components, and related services that use identified locations of wireless devices to provide directional assistance such that Defendant infringes claims 1–30 of the '196 patent, literally or under the doctrine of equivalents.
11. Defendant put the inventions claimed by the '196 Patent into service (i.e., used them); but for Defendant's actions, the claimed-inventions embodiments involving Defendant's products and services would never have been put into service. Defendant's acts complained of herein caused those claimed-invention embodiments as a whole to perform, and Defendant obtaining monetary and commercial benefit from it.
12. Defendant has and continues to induce infringement. Defendant has actively encouraged or instructed others (e.g., its customers), and continues to do so, on how to use its products and services (e.g., U.S. wireless networks, wireless-network components that use identified locations of wireless devices to provide directional assistance) such to cause infringement

claims 1–30 of the '196 patent, literally or under the doctrine of equivalents. Moreover, Defendant has known and should have known of the '196 patent, by at least by the date of the patent's issuance, or from the issuance of the '284 patent, which followed the date that the patent's underlying application was cited to Defendants by the U.S. Patent and Trademark Office during prosecution of one of Defendant's patent applications, such that Defendant knew and should have known that it was and would be inducing infringement.

13. Defendant has and continues to contributorily infringe. Defendant has actively encouraged or instructed others (e.g., its customers and/or the customers of its related companies), and continues to do so, on how to use its products and services e.g., U.S. wireless networks, wireless-network components that use identified locations of wireless devices to provide directional assistance) such as to cause infringement of one or more of claims 1–30 of the '196 patent, literally or under the doctrine of equivalents. Moreover, Defendant has known of the '196 patent and the technology underlying it from at least the date of issuance of the patent or from the issuance of the '284 patent, which followed the date that the patent's underlying application was cited to Defendant by the U.S. Patent and Trademark Office during prosecution of one of Defendant's patent applications, such that Defendant knew and should have known that it was and would be contributorily infringing.

14. Defendants have caused and will continue to cause Traxcell damage by infringing the '196 patent.

#### **IV. INFRINGEMENT ('388 Patent (Attached as exhibit B))**

15. On January 17, 2017, U.S. Patent No. 9,549,388 ("the '388 patent") entitled "Mobile wireless device providing off-line and on-line geographic navigation information" (attached as


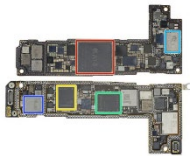


Exhibit D) was duly and legally issued by the U.S. Patent and Trademark Office. Traxcell owns the '388 patent by assignment.

16. The '388 Patent's Abstract states, "A mobile device, wireless network and their method of operation provide both on-line (connected) navigation operation, as well as off-line navigation from a local database within the mobile device. Routing according to the navigation system can be controlled by traffic congestion measurements made by the wireless network that allow the navigation system to select the optimum route based on expected trip duration."

17. The following preliminary exemplary chat provides Traxcell's allegations of infringement.

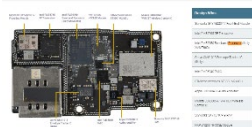
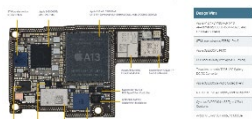
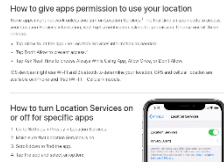
Representative Claim	Corresponding Structure in Accused Systems
A wireless communications system including:	<p>Apple Devices that supports the Apple Maps online navigation service together with the Apple Maps server-side or cloud infrastructure needed to provide the service, constitute the "Accused System".</p> <p>The term "Apple Maps" encompasses and includes all the versions and variants of the Apple Maps web (for PCs, laptops and other computers functioning with macOS or Mac OS X operating systems) and the Apple Maps app [Apple Maps app for iOS devices (iPhone, iPad, MacBook, iPod Touch, iwatch etc.) and watchOS devices] and the applications supported by the Apple Maps Platform.</p> <p>The "communications device" refers to a UE (example: iPhone, iPad, MacBook, iPod Touch, iwatch etc.) including the Apple Maps app or including a browser plugin enabling access to the Apple Maps website or having other means to access the Apple Maps website for querying and receiving navigation instructions for travelling from a starting location (current location of the communications device or a location specified by its user as the 'origin') to a destination location (a location specified by the said user as the 'destination').</p> <p>The said "communications device" (the user of the said "communications device") being an apple device using wireless telecommunications network services.</p>

Representative Claim	Corresponding Structure in Accused Systems
	<p>Because infringement liability is not dependent on ownership, e.g., use of a system can infringe (35 U.S.C. § 271), infringement is not dependent on ownership of all limitations of a claim.</p>
<p>a first radio-frequency transceiver within a wireless mobile communications device and an associated first antenna to which the first radio-frequency transceiver is coupled, wherein the first radio-frequency transceiver is configured for radio-frequency communication with a wireless communications network;</p>	<p>Plaintiff contends a wireless communications device corresponds to this claim element as each is a device that provides communicative access to a wireless network by transceivers designed and used for radio-frequency communication and at least one antenna. When a wireless communication device transceivers and antennas are in communication, they are coupled. Further, in addition to being so coupled, the transceiver of a wireless communications device is also configured for RF-communication wireless communication networks, such as AT&amp;T, Verizon, T-Mobile, and other US networks (Cellular or WLAN) via Apple Maps.</p> <p>Each wireless communications device made, used, sold or imported by Apple includes a radio frequency transceiver. Wireless mobile communication device including to Apple's branded devices</p> <p>such as example: iPhone, iPad, MacBook, iPod Touch, iwatch etc. include radio-frequency transceivers and an associated antenna. When wireless communication device transceivers and antennas are in communication, they are coupled. Further, in addition to being so coupled, the transceiver of each such wireless communications device is also configured for RF-communication with the wireless communication network.</p> <p>The following exemplifies this limitation's existence in Accused Systems:</p> <div data-bbox="365 1375 625 1669"> </div> <p><b>Link:</b> <a href="https://www.ifixit.com/Guide/iPhone+6+Wi-Fi+Antenna+Replacement/90315">https://www.ifixit.com/Guide/iPhone+6+Wi-Fi+Antenna+Replacement/90315</a></p>

Representative Claim	Corresponding Structure in Accused Systems
	<div data-bbox="370 302 617 428">  </div> <p data-bbox="370 464 1193 499"><b>Source:</b> Antenna of iPhone Teardown by Ifixit (Time-5:50/7:21)</p> <p data-bbox="370 531 1523 567"><b>Link:</b> <a href="https://www.ifixit.com/Guide/iPhone+6+Antenna+Flex+Cable+Replacement/90317">https://www.ifixit.com/Guide/iPhone+6+Antenna+Flex+Cable+Replacement/90317</a></p> <div data-bbox="370 663 626 722"> <p>Below the RF modules that were identified in the teardown, Qualcomm and SiGe have had the bulk of the RF modules on separate chipsets from iPhone 5 and 5s. In the below photo, the yellow rectangle is a Qualcomm SDX55 5G and LTE transceiver, the green is a Qualcomm SDX55 5G module RF system and SDX55C intermediate frequency IC and the dark blue is an Analog IC/RF high-end power amplifier with integrated filter.</p> </div> <div data-bbox="386 730 574 884">  </div> <p data-bbox="370 926 1560 1003"><b>Link:</b> <a href="https://www.microwavejournal.com/blogs/9-pat-hindle-mwj-editor/post/34907-iphone-1212-pro-teardown-for-rf">https://www.microwavejournal.com/blogs/9-pat-hindle-mwj-editor/post/34907-iphone-1212-pro-teardown-for-rf</a></p> <div data-bbox="370 1031 617 1171">  </div> <p data-bbox="370 1272 1518 1308"><b>Source:</b> (Teardown of Apple 12 showing Antenna, 5G and LTE Transceiver component).</p> <p data-bbox="370 1339 1453 1375"><b>Link:</b> <a href="https://www.ifixit.com/Teardown/iPhone+12+and+12+Pro+Teardown/137669">https://www.ifixit.com/Teardown/iPhone+12+and+12+Pro+Teardown/137669</a></p> <div data-bbox="370 1535 626 1713"> <p><b>Connect to Wi-Fi on your iPhone, iPad, or iPod touch</b></p> <p>Learn how to connect your device to a Wi-Fi network, including open, secure, public networks, and networks that you've connected to in the past.</p> <p><b>Connect to a Wi-Fi network</b></p> <ol style="list-style-type: none"> <li>1. From your home screen, go to Settings &gt; Wi-Fi.</li> <li>2. Tap on Wi-Fi. Your device will automatically search for available Wi-Fi networks.</li> <li>3. Tap the name of the Wi-Fi network that you want to join. There may be a password or other security information to enter. The network's password is shown in green and next to the network name.</li> </ol> <p>After you join the network, you'll see a checkmark next to the network name. To connect to a different Wi-Fi network, tap the Wi-Fi icon in the top-left corner of the screen. To connect to a network that you've joined before, tap the Wi-Fi icon in the top-left corner of the screen. To connect to a network that you've joined before, tap the Wi-Fi icon in the top-left corner of the screen.</p>  </div> <p data-bbox="370 1812 992 1848"><b>Link:</b> <a href="https://support.apple.com/en-in/HT202639">https://support.apple.com/en-in/HT202639</a></p>




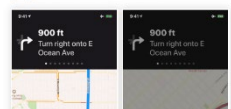
Representative Claim	Corresponding Structure in Accused Systems
	 <p>Link: <a href="https://devicesupport.swisscom.ch/apple/iphone-7-plus/connectivity/select-a-network/">https://devicesupport.swisscom.ch/apple/iphone-7-plus/connectivity/select-a-network/</a></p>  <p>Source: (Apple Maps application preloaded on Apple Devices)</p> <p>Link: <a href="https://www.usatoday.com/story/tech/2019/06/04/ios-13-apple-maps-upgrade-fall/1337077001/">https://www.usatoday.com/story/tech/2019/06/04/ios-13-apple-maps-upgrade-fall/1337077001/</a></p>
<p>a first processor within the wireless mobile communications device coupled to the at least one first radio-</p>	<p>Plaintiff contends each such wireless communications device corresponds to this claim limitation because each such wireless communications device includes a processor. Wireless mobile communication device- including to Apple's branded devices such as has a processor, for example, Quad-Core/ Octa-core processor. Each such wireless communications device's motherboard processor is programmed to process location-service information; i.e., to receive a location of the device from the wireless communications network (which is communicated to the device from the first RF transceiver) and generate an indication of the device's location with respect to geographic features according to</p>

Representative Claim	Corresponding Structure in Accused Systems
frequency transceiver	<p>mapping information stored within the device. For example, the motherboard processor may use Apple Maps to view and find places around the globe. The processor and base station transceivers communicate by RF communication and, thus, when doing so are communicatively coupled.</p> <p>The following exemplifies the existence of this limitation in Accused Systems:</p> <div data-bbox="370 562 620 688">  </div> <p><b>Source:</b> Apple iPhone 11 Pro Max Teardown  <b>Link:</b> <a href="https://www.techinsights.com/blog/apple-iphone-11-pro-max-teardown">https://www.techinsights.com/blog/apple-iphone-11-pro-max-teardown</a></p> <div data-bbox="370 846 620 972">  </div> <p><b>Source:</b> Apple iPhone 11 Pro Max Teardown  <b>Link:</b> <a href="https://www.techinsights.com/blog/apple-iphone-11-pro-max-teardown">https://www.techinsights.com/blog/apple-iphone-11-pro-max-teardown</a></p> <div data-bbox="370 1199 592 1360">  </div> <p><b>Link:</b> <a href="https://support.apple.com/en-in/HT207092">https://support.apple.com/en-in/HT207092</a></p> <div data-bbox="370 1598 613 1749"> <p><b>Location Services &amp; Privacy</b></p> <p>Location services is designed to protect your information and enable you to choose what you share.</p> <p>Location Services allows apps, system services, and websites to gather and use location information about you. Location Services uses a variety of methods to determine your location. For example, it may use GPS, Wi-Fi, cellular, and Bluetooth. Location Services also uses information from other apps and services to help determine your location.</p> <p>By using Location Services, you may be able to use location-based services, such as maps and navigation. Location Services also uses location information to help you find nearby businesses and services.</p> <p>For more information about Location Services, visit <a href="https://support.apple.com/en-in/HT207092">https://support.apple.com/en-in/HT207092</a>.</p> </div>








Representative Claim	Corresponding Structure in Accused Systems
	<p>Link: <a href="https://support.apple.com/en-us/HT207056">https://support.apple.com/en-us/HT207056</a></p> <p>How your device uses Location Services</p> <p>When you use location services on your device, it uses a combination of GPS, Wi-Fi, and cellular data to determine your location. It also uses a variety of other sensors, such as the accelerometer and gyroscope, to help it determine your location more accurately. Location services are used by many apps, including Maps, Weather, and Find My. You can control which apps are allowed to use location services in the Settings app.</p> <p>Link: <a href="https://support.apple.com/en-in/HT203033">https://support.apple.com/en-in/HT203033</a></p> <p>Link: <a href="https://support.apple.com/en-us/HT207056">https://support.apple.com/en-us/HT207056</a></p>
<p>programmed to receive a location of the wireless mobile communications device from the wireless communications network and generate an indication of a location of the wireless mobile communications device with respect to geographic features</p>	<p>Plaintiff contends such wireless communications device's motherboard processor is programmed to process location-service information; i.e., to receive a location of the device from the wireless communications network and generate an indication of the device's location.</p> <p>For example, the application processor may use Apple Maps to obtain the device's location and provide direction from that location to a destination. Wireless mobile communication devices including to Apple's branded devices such as iPhones, MacBook, iPad and iPod has a processor for example, Quad-Core processor. When wireless communication device transceivers and processor are in communication, they are coupled. Further, the Location-based Service (LBS) provider, such as Apple Map, on such wireless communications device utilizes the processor coupled to the transceiver to estimates/receive the location on mobile wireless communications devices by utilizing wireless communication network or first computer.</p> <p>For example, the Application processor may use Apple Maps to view and find places around the globe. Apple map can also show your current location and provide direction (including with respect to geographic features such as nearby restaurants) from your location/source to any destination. In using Apple Maps App, the mobile wireless communication device's application processor generates signals for displaying on the device's screen a blue marker that shows the current location of the wireless mobile communication device. The Apple map</p>



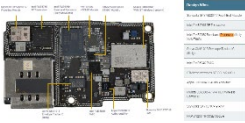
Representative Claim	Corresponding Structure in Accused Systems
	<p>Find nearby attractions and services in Maps on iPhone</p> <p>Find a nearby service</p>  <p><b>Source:</b> Find nearby attractions and services in Maps on iPhone</p> <p><b>Link:</b> <a href="https://support.pple.com/en-in/guide/iphone/iphbaf51b2c0/ios">https://support.pple.com/en-in/guide/iphone/iphbaf51b2c0/ios</a></p>
<p>according to mapping information stored within the wireless mobile communications device, and</p>	<p>Plaintiff contends the mobile-wireless-communications device's application processor is programmed to process location based service information; i.e., to receive a location of the device from the wireless communications network and generate an indication of the device's location.</p> <p>For example, the application processor may use Apple Maps to obtain the device's location and provide direction from that location to a destination. Wireless mobile communication device- including to Apple's branded devices such as iPhone, MacBook, iPad and iPod has a processor for example, Quad-Core processor. When wireless communication device transceivers and processor are in communication, they are coupled. Further, the Location-based Service (LBS) provider, such as Apple Map, on such wireless communications device utilizes the processor coupled to the transceiver to estimates/receive the location on mobile wireless communications devices (specifically one or more of the mobile wireless communications devices) by utilizing wireless communication network or first computer.</p> <p>For example, the Application processor may use Apple Maps to view and find places around the globe. Apple map can also show your current location and provide direction (including with respect to geographic features such as nearby restaurants) from your location/source to any destination. In using Apple Maps App, the mobile wireless communication device's application processor generates signals for displaying on the device's screen a blue marker that shows the current location of the wireless mobile communication device. The Apple map estimates the location of the device from various sources: GPS (GPS uses satellites and knows your location within a few meters), Bluetooth, Wi-Fi (the location of nearby Wi-Fi</p>

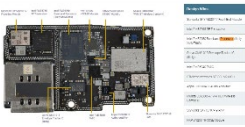
Representative Claim	Corresponding Structure in Accused Systems
	<p>networks helps Maps know where you are), and cell towers (cell tower can be accurate up to a few thousand meters). When Apple Maps isn't sure about your location, a light blue circle around the blue dot is shown. You might be anywhere within the light blue circle. The size of the circle shows how precisely your location can be determined—the smaller the circle, the greater the precision. When Location Services is active, a black or white arrow icon appears in the status bar.</p> <p>Furthermore, Apple Maps App provides flexibility to download maps on internal memory of communication device such as iPhone, iPad, MacBook, iPod Touch, iwatch etc. and navigate offline. When internet is slow or mobile data is expensive, or communication device cannot connect to internet, an area can be saved to communication devices such as iPhone, iPad, MacBook, iPod Touch, iwatch etc. from Apple maps app and use it when offline. Communication device can use Offline maps for Navigation through the downloaded area without internet.</p> <p>The following exemplifies the existence of this limitation in Accused Systems:</p> <div data-bbox="360 1035 612 1308"> <p><b>How your device uses Location Services</b></p> <p>With your permission, Location Services allows apps and services to access your location. Location Services may also request to use information from your cell tower, Wi-Fi, and Bluetooth devices to help determine your location. You may choose to allow or deny Location Services for individual apps, or you may choose to allow or deny Location Services for all apps.</p> <p><b>Improve GPS accuracy</b></p> <p>GPS is the most accurate way to determine your location, but it can be slow and may not work in some areas. To improve GPS accuracy, you can use other location services, such as Wi-Fi, cell towers, and Bluetooth devices, to help determine your location. You can choose to use these services to improve GPS accuracy, or you can choose not to use them.</p> <p><b>Crowd-sourced Wi-Fi and cellular Location Services</b></p> <p>Location Services can use information from other devices to help determine your location. This information is used to improve the accuracy of location services for all devices. You can choose to use this information to improve location services, or you can choose not to use it.</p> </div> <p>Link: <a href="https://support.apple.com/en-in/HT203033">https://support.apple.com/en-in/HT203033</a></p> <div data-bbox="360 1440 612 1663"> <p><b>Getting Offline Navigation</b></p> <p>To get directions while connected to the internet, tap the address you'd like to go to so you usually would in Apple Maps. Tap the "Go" icon, then tap "Download" to download the map. The map will be downloaded to your device and you can use it offline.</p>  </div> <p>Link: <a href="https://ios.gadgethacks.com/how-to/download-maps-navigation-routes-for-offline-use-apple-maps-0184439/">https://ios.gadgethacks.com/how-to/download-maps-navigation-routes-for-offline-use-apple-maps-0184439/</a></p>

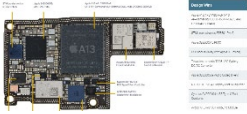
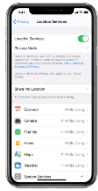
Representative Claim	Corresponding Structure in Accused Systems
	<p>Find nearby attractions and services in Maps on iPhone</p> <p>Use Siri to find the Maps app. Or find it manually in the Home screen, App Store, or Spotlight.</p> <p>Find a nearby service</p> <p>1. Ask Siri. Say something like "Find a nearby service." Or "Find a nearby service near me." Open the Maps app.</p> <p>2. Tap the Maps app icon on the Home screen or in the App Store.</p> <p>3. Tap the "Nearby" tab at the bottom of the screen.</p> <p>4. Tap the category you want to find.</p> <p>5. Tap the location you want to go to.</p> <p>6. Tap the "Directions" button.</p> <p>7. Tap the "Go" button.</p>  <p><b>Source:</b> Find nearby attractions and services in Maps on iPhone</p> <p><b>Link:</b> <a href="https://support.apple.com/en-in/guide/iphone/iphbaf51b2c0/ios">https://support.apple.com/en-in/guide/iphone/iphbaf51b2c0/ios</a></p>
<p>wherein the processor displays to the user navigation information according to the location of the wireless mobile communications device with respect to the geographic features and a destination specified by the user at the wireless mobile communications device;</p>	<p>Plaintiff contends the application processor of each such wireless communications device (i.e., mobile wireless communications device) meets this limitation. The processor processes location-service information, including displaying user navigation information according to the device's location with regards to geographic features and a user-specified destination. For example, using Apple map app for more examples of location services processed by each such wireless communications device's application processor) the device user locates the device's current location on the Apple map app and then provide details for a destination on the options, provided in the Apple map app. The user can then navigate (i.e., the processor processes display information) in real time from current location to destination. The processor displays navigation in the Apple Maps app to display turn-by-turn directions. Using the Apple map app, the processor will show the directions and use real-time traffic information to find the best route to the specified destination.</p> <p>The following exemplifies this limitation's existence in Accused Systems:</p> <p>Get driving directions from your current location in Maps on iPhone</p> <p>In the Maps app, you can get detailed driving directions to your destination.</p> <p>Get directions for driving</p> <p>1. Ask Siri. Say something like: "Give me driving directions home." If multiple routes appear, tap Go for the route you want. Or wait a moment and let Siri select a route for you. <a href="#">Learn how to ask Siri.</a></p> <p>Or without asking Siri, you can do the following:</p> <ol style="list-style-type: none"> <li>1. Tap your destination, such as a landmark on a map, or touch and hold any spot on the map.</li> <li>2. Tap Directions, tap , then tap Go for the route you want.</li> </ol> <p>Note: Before you tap Go, you can <a href="#">select other route options</a>. For example, you can choose to avoid tolls or highways.</p> <p>As you travel along your route, Maps speaks turn-by-turn directions to your destination. You can turn off voice directions, change the volume, or change the audio output device. See <a href="#">Change audio settings for turn-by-turn directions in Maps on iPhone</a>.</p> <p>To end the directions at any time, tap End, or say something like "Hey Siri, stop navigating."</p>

Representative Claim	Corresponding Structure in Accused Systems
	<p>Link: <a href="https://support.apple.com/en-in/guide/iphone/iph84a94043/ios">https://support.apple.com/en-in/guide/iphone/iph84a94043/ios</a></p> <p>Show your current location</p> <p>Tap .</p> <p>Your position is marked in the middle of the map. The top of the map is north. To show your heading, tap . To zoom in, tap . To zoom out, tap .</p>  <p>Link: <a href="https://support.apple.com/en-in/guide/iphone/iph10d7bdf26/ios">https://support.apple.com/en-in/guide/iphone/iph10d7bdf26/ios</a></p> <p>To send this direction as a text message, tap  or tap something like "Tap to share" (depending on your device).</p>  <p>Link: <a href="https://support.apple.com/en-in/guide/iphone/iph84a94043/ios">https://support.apple.com/en-in/guide/iphone/iph84a94043/ios</a></p>
<p>at least one second radio-frequency transceiver and an associated at least one second antenna of the wireless communications network to which the second radio-frequency transceiver is coupled; and</p>	<p>Plaintiff contends each Accused System includes at least one item, each of which is a base station and each of which is coupled to at least one antenna. Base station includes radio-frequency transceivers designed and used for radio-frequency communication with at least one antenna. When base-station transceivers and antennas are in communication, they are coupled. Further, in addition to being so coupled, the transceivers and antenna are also, by placement within a base station, physically coupled.</p> <p>The cell of the wireless communications network include base stations for transmission and reception of wireless signals to and from the mobile wireless communication devices or UEs or user devices (mobile phones, laptops, tablets, PDAs etc.). These base stations are, therefore, RF transceivers. Also, these base stations are coupled with at least one antenna for the function of transmission and reception.</p> <p>The following exemplifies this limitation's existence in Accused Systems:</p> <p>How your device uses Location Services</p> <p>When you permit Location Services, apps and services (including Maps, Contacts, Weather, and other apps) can use location data to help you find things, like nearby restaurants, and to help you find things like your car. Location Services also use location data to help you find things like your car. Location Services also use location data to help you find things like your car. Location Services also use location data to help you find things like your car.</p> <p>Link: <a href="https://support.apple.com/en-in/HT203033">https://support.apple.com/en-in/HT203033</a></p>



Representative Claim	Corresponding Structure in Accused Systems
<p>a second processor coupled to the at least one second radio-frequency transceiver programmed to determine the location of the wireless mobile communications device,</p>	<p>Plaintiff contends that Apple Maps running on Apple's branded device has one or more processors that determine(s) the location of wireless mobile communications devices. These processors communicatively coupled to the second RF transceiver(s) and are programmed to determine a wireless mobile communication device's location.</p> <p>Wireless mobile communications devices can, through the second RF transceiver(s), communicatively connect to and use Apple Maps. Apple Maps' communication or wireless processors can determine the device's current location and direction from that location/source to any destination. The processors are programmed to estimate the location of the device from various sources: GPS (GPS uses satellites and knows your location within a few meters), Bluetooth, Wi-Fi (the location of nearby Wi-Fi networks helps Maps know where you are), and Cellular (cell towers can be accurate up to a few thousand meters).</p> <p>The following exemplifies this limitation's existence in Accused Systems:</p>  <p><b>Source:</b> Apple iPhone 11 Pro Max Teardown  <b>Link:</b> <a href="https://www.techinsights.com/blog/apple-iphone-11-pro-max-teardown">https://www.techinsights.com/blog/apple-iphone-11-pro-max-teardown</a></p> <p><small>How your device uses Location Services  When you permit, Location Services allows apps and websites to use Maps, Context, Weather, and other apps to use information from cellular, Wi-Fi, Global Positioning System (GPS) networks, and Bluetooth to determine your approximate location.</small></p> <p><b>Link:</b> <a href="https://support.apple.com/en-in/HT203033">https://support.apple.com/en-in/HT203033</a></p>
<p>wherein the second processor selectively determines the location of the wireless mobile communications device dependent</p>	<p>Plaintiff contends each such wireless communications device can set preference flags that enable or disable accessibility to data relevant to the device's location by Location-Based Services (LBS) providers. Such programmability by a wireless device is at times known as a privacy setting. Further, such programmability is available by location-permission granting (wireless mobile communications device must grant permission).</p> <p>The LBS providers' processors select to determine a wireless mobile communications device's locations if the preference flags applicable to that device have been set for enablement. The processors select to not determine a wireless mobile communications</p>

Representative Claim	Corresponding Structure in Accused Systems
<p>on the setting of preference flags,</p>	<p>device's locations if the preference flags applicable to that device have not been set for enablement.</p> <p>The following exemplifies this limitation's existence in Accused Systems:</p> <p><b>Link:</b> <a href="https://support.apple.com/en-in/HT207092">https://support.apple.com/en-in/HT207092</a></p>
<p>wherein the second processor determines the location of the wireless mobile communications device if the preference flags are set to a state that permits tracking of the user of the wireless mobile communications device and communicates the location of the wireless mobile communications device to the first processor via the second radio-frequency transmitter, and</p>	<p>Plaintiff contends each such wireless communications device can set preference flags that enable or disable accessibility to data relevant to the device's location by Location-Based Services (LBS) providers. The LBS providers' processors select to determine a wireless mobile communications device's locations if the preference flags applicable to that device have been set for enablement. The processors select to not determine a wireless mobile communications device's locations if the preference flags applicable to that device have not been set for enablement.</p> <p>The Navigation hardware/software will only be able to determine and track the location of the Wireless communication device such as Apple's branded devices such as iPhone, iPad, MacBook, iPod Touch, iwatch etc. , Plaintiff contends each such wireless communications device can set preference flags that enable or disable accessibility to data relevant to the device's location by Location-Based Services (LBS) providers. Such programmability by a wireless device is at times known as a privacy setting. Further, such programmability is available by location-permission granting (wireless mobile communications device must grant permission).</p> <p>Plaintiff contends that if the preference flags are enabled (i.e., the wireless-mobile-communication device's user has granted permission), LBS-providers' processor(s) proceed with determining the device's location and, when determined, communicates that location to the first processor through the second RF transceiver (which, as discussed above, is a transceiver to which the LBS-providers' processors communicatively couple). The LBS-providers' processors are programmed to estimate the location of the device from 3 sources: GPS (GPS uses satellites and knows your location within a few meters), Wi-Fi (the location of nearby Wi-Fi networks helps Maps know where you are), and cell towers (cell tower can be accurate up to a few thousand meters).</p> <p>The following exemplifies this limitation's existence in Accused Systems:</p> 

Representative Claim	Corresponding Structure in Accused Systems
	<p><b>Source:</b> Apple iPhone 11 Pro Max Teardown</p> <p><b>Link:</b> <a href="https://www.techinsights.com/blog/apple-iphone-11-pro-max-teardown">https://www.techinsights.com/blog/apple-iphone-11-pro-max-teardown</a></p>  <p><b>Attachment 7 (Apple iPhone 11 Pro Max Teardown).</b></p> <p>How your device uses Location Services Why your permission, Location Services allow apps and websites including Maps, Weather, and other apps to use information from services like GPS, Cellular Networking System (CNS), Wi-Fi, and Bluetooth to determine your approximate location.</p> <p><b>Link:</b> <a href="https://support.apple.com/en-in/HT203033">https://support.apple.com/en-in/HT203033</a></p>  <p><b>Link:</b> <a href="https://support.apple.com/en-in/HT207092">https://support.apple.com/en-in/HT207092</a></p>

Representative Claim	Corresponding Structure in Accused Systems
<p>wherein the second processor does not determine and communicate the location of the wireless mobile communications device if the preference flags are set to a state that prohibits tracking of the wireless mobile communications device.</p>	<p>Plaintiff contends that if the preference flags are not enabled (i.e., the wireless-mobile-communication device's user has not granted permission), LBS provider application hardware/software, will not be able to determine and track the location of the Wireless communication device such as iPhone, iPad, MacBook, iPod Touch, iwatch etc., if the location flag on the Wireless communication device is turned off (that is, locations privacy settings are set to "Never").</p> <p>The following exemplifies this limitation's existence in Accused Systems:</p> <div data-bbox="402 667 776 720"> <p><b>How to turn Location Services on or off for specific apps</b></p> </div> <div data-bbox="402 730 776 1077"> <ol style="list-style-type: none"> <li>1. Go to Settings &gt; Privacy &gt; Location Services.</li> <li>2. Make sure that Location Services is on.</li> <li>3. Scroll down to find the app.</li> <li>4. Tap the app and select an option: <ul style="list-style-type: none"> <li>• Never: Prevents access to Location Services information.</li> <li>• Ask Next Time: This allows you to choose Always While Using App, Allow Once, or Don't Allow.</li> <li>• While Using the App: Allows access to Location Services only when the app or one of its features is visible on screen. If an app is set to While Using the App, you might see your status bar turn blue with a message that an app is actively using your location.</li> <li>• Always: Allows access to your location even when the app is in the background.</li> </ul> </li> </ol> <p>From here, apps should provide an explanation of how the app will use your location information. Some apps might offer only two options. Learn more about <a href="#">privacy and Location Services</a>.</p> </div> <div data-bbox="800 653 1057 1167"> </div> <p><b>Link:</b> <a href="https://support.apple.com/en-in/HT207092">https://support.apple.com/en-in/HT207092</a></p>

18. Defendant makes, uses, offers to sell, and/or sells within or imports into the U.S. wireless networks, wireless-network components, and related services that use identified locations of wireless devices to provide tracking such that Defendant infringes claims 1–30 of the '388 patent, literally or under the doctrine of equivalents.

19. Defendant put the inventions claimed by the '388 Patent into service (i.e., used them); but for Defendant's actions, the claimed-inventions embodiments involving Defendant's products and services would never have been put into service. Defendant's acts complained of herein caused those claimed-invention embodiments as a whole to perform, and Defendant obtaining monetary and commercial benefit from it.
20. Defendant has and continues to induce infringement. Defendant has actively encouraged or instructed others (e.g., its customers), and continues to do so, on how to use its products and services (e.g., U.S. wireless networks, wireless-network components that use identified locations of wireless devices to provide tracking of mobile devices) such to cause infringement claims 1–30 of the '388 patent, literally or under the doctrine of equivalents. Moreover, Defendant has known and should have known of the '388 patent, by at least by the date of the patent's issuance, or from the issuance of the '284 patent, which followed the date that the patent's underlying application was cited to Defendant by the U.S. Patent and Trademark Office during prosecution of one of Defendant's patent applications, such that Defendant knew and should have known that it was and would be inducing infringement.
21. Defendant has and continues to contributorily infringe. Defendant has actively encouraged or instructed others (e.g., its customers and/or the customers of its related companies), and continues to do so, on how to use its products and services e.g., U.S. wireless networks, wireless-network components that use identified locations of wireless devices to provide tracking of mobile devices) such as to cause infringement of one or more of claims 1–30 of the '388 patent, literally or under the doctrine of equivalents. Moreover, Defendant has known of the '388 patent and the technology underlying it from at least the date of issuance

of the patent or from the issuance of the '284 patent, which followed the date that the patent's underlying application was cited to Defendant by the U.S. Patent and Trademark Office during prosecution of one of Defendant's patent applications, such that Defendant knew and should have known that it was and would be contributorily infringing.

22. Defendant has caused and will continue to cause Traxcell damage by infringing the '388 patent.

## **V. PRAYER FOR RELIEF**

WHEREFORE, Traxcell respectfully requests that this Court:

- i. enter judgment that Defendant has infringed the Patents-in-Suit;
- ii. award Traxcell damages in an amount sufficient to compensate it for Defendant's infringement of the Patents-in-Suit, in an amount no less than a reasonable royalty, together with prejudgment and post-judgment interest and costs under 35 U.S.C. § 284;
- iii. award Traxcell an accounting for acts of infringement not presented at trial and an award by the Court of additional damage for any such acts of infringement;
- iv. declare this case to be "exceptional" under 35 U.S.C. § 285 and award Traxcell its attorneys' fees, expenses, and costs incurred in this action;
- v. declare Defendant's infringement to be willful and treble the damages, including attorneys' fees, expenses, and costs incurred in this action and an increase in the damage award pursuant to 35 U.S.C. §284;
- vi. a decree addressing future infringement that either (i) awards a permanent injunction enjoining Defendant and its agents, servants, employees, affiliates, divisions, and subsidiaries, and those in association with Defendant, from infringing the claims of the Patents-in-Suit or (ii) award damages for future infringement in lieu of an injunction, in an

amount consistent with the fact that for future infringement the Defendant will be adjudicated infringers of a valid patent, and trebles that amount in view of the fact that the future infringement will be willful as a matter of law; and,

- vii. award Traxcell such other and further relief as this Court deems just and proper.

**JURY DEMAND**

Traxcell hereby requests a trial by jury on issues so triable by right.

Respectfully submitted,

**Ramey & Schwaller, LLP**

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